

Notes on some Butterflies in the Collection of the Bombay Natural History Society

BY

N. T. NADKERNY

Bombay Natural History Society, Bombay

Among the nearly 2500 species, subspecies and races of butterflies in the Indian region, the Society's collection has about 1100 species, subspecies and races constituting hardly 45 per cent of the total. A very large number of the west Himalayan species and many of the plains species are not fully represented. The Lycaenids, Hesperids and Satyrids are poorly represented constituting about 38, 20 and 43 per cent respectively of the known species. While examining the specimens in this comparatively small collection it was found that some were collected from places which fall far beyond their distributional area as indicated by Evans (1932), Talbot (1939 and 1942), and Wynter-Blyth (1957). In the list below the habitat mentioned by these authors is given as distribution and the total number of specimens present is given with their locality of collection. It will be seen that quite a few which were supposed to be only Himalayan or north Indian have been caught in central and south India and vice versa. Specimens collected from such places do not show any differences in characters from those collected in the known habitat.

Family DANAIDAE

1. *Danaus aglea aglea* Cr. Glassy Tiger

15 : 1 Bombay, August ; 3, Nilgiris, January, July, October ; 5 Goa, September-October ; 4 N. Kanara, January, July, September, October ; 1 Cannanore ; 1 Ceylon, No date.

Distribution : Ceylon ; S. India up to Poona ; Himalayas from Kashmir east to Assam ; Bengal ; Burma.

Best (1951) considers it as rare in Bombay and available only in August especially at Powai. We collected one at the Malabar Hill, Bombay, in September, 1959.

Family SATYRIDAE

2. **Mycalesis perseoides** (M.) Burmese Bushbrown

4 : 2 Manipur, Jan. ; 2 Pachmarhi, Oct.

Distribution : Burma, Pegu Yomas, Chindwin, where it is said to be common.

A considerable westward extension of the known distribution.

3. **Mycalesis rama** (M.) Singalese Bushbrown

2 : Both at Kallar, Nilgiris, Aug.

Distribution : Ceylon.

This species has not been recorded in India so far, as far as I am aware.

4. **Mycalesis malsara** M. Whiteline Bushbrown

11 : 3 Palni Hills, July ; 3 Karwar, Jan., Apr., Aug. ; 5 Burma, Feb., Mar., Sept.

Distribution : Kumaon, Bengal, Sikkim, Assam ; Rangoon.

Species of *Mycalesis* are not known to migrate and the occurrence of this Himalayan form in the western Ghats shows similarity in its distribution to vertebrate species of Himalayan affinity occurring in the Western Ghats. It is possible that this rare species breeds sparsely in these places and is uncommon.

5. **Orinoma damaris** Gr. Tigerbrown

5 : 2 Nilgiris, May ; 1 Sikkim, May ; 1 Assam, May ; 1 Burma, Oct.

Distribution : Kangra to Assam and Burma.

This species which was known from the Himalayas is now recorded from the Nilgiris.

6. **Erebia nirmala** M. Common Argus

4 : 2 Assam (Garsa and Nag Tibi), July ; 2 Nilgiris, July.

Distribution : Himalayas, Kumaon, Murree, Kangra, Kashmir, Chitral.

Reported only from the Western Himalayas. It is now reported from Assam in the east and Nilgiris in the south for the first time.

7. **Erebia shallada** Lang. Mountain Argus

3 : 2 Assam (Nag Tibi), No date ; 1 Kulu, July.

Distribution : Chitral, Kashmir, Kumaon—N.W. Himalayas. Eastern range is now extended to Assam.

Family NYMPHALIDAE

8. *Diagora persimilis* (Westw.) Siren

2 : Both in Palampur (Punjab), July.

Distribution : Simla to Assam, Orissa, Sikkim to Shan States.
Palampur is far to the west of the recorded habitat.

9. *Penthema lisarda* (Doub.) Yellow Kaiser

1 Mansi (Burma), April.

Distribution : Sikkim to Assam and Chin Hills.

Mansi extends the eastward distribution.

10. *Euthalia nais* (Forst.) Baronet

13 : 3 Khandesh, Dec. ; 8 Nilgiris, June to Oct. ; 1 Telligheri, Mar. ; 1 Pachmarhi, no date.

Distribution : South India, Dehra Dun to Sikkim, Konkan, Saurashtra, Madhya Pradesh and Ceylon.

Though not noted in or near Khandesh so far, it seems to be a common species all over India.

Family LYCAENIDAE

11. *Everes argiades indica* W.B. Tailed Cupid

5 : 1 Palni Hills, July ; 1 Kangra, Sept. ; 2 Gund, May ; 1 Gunderbal, May.

Distribution : Chitral to Kumaon to Burma, Sikkim, and Bhutan.

Another instance of a Himalayan form occurring in the Western Ghats.

12. *Nacaduba ceylonica* Fr. (= *sinhala* Orm.). Pale Ceylon 6 Lineblue

11 : 6 Karwar, June and Aug. ; 2 Kodaikanal, Oct. ; 1 Darjeeling, Oct. ; 2 Manipur, May.

Distribution : Ceylon.

Cantlie (1962) has called this species *N. sinhala* Orm. as *N. atrata* (the original name) is invalid and *ceylonica* Fruh. is a homonym because of page priority of *N. pactolus ceylonicus* Fruh. as pointed out by Corbet. (The underside of the various specimens is not uniform, some have pale lines, some are deep and a few of medium depth. This is not attributable to localities as this variation is found in examples collected even from the same locality. These specimens may have to be re-examined.)

13. *Nacaduba berenice plumbeomicans* WM. & DeN. Rounded

6 Lineblue

4 : 4 Karwar, Mar., Aug., Oct.

Distribution : Assam, Andamans and Tavoy to S. Burma.

Nacaduba species love moist forests and the occurrence of the species at Karwar possessing similar environment as the recorded habitat is another instance of discontinuous distribution mentioned earlier.

14. **Heliophorus tamu tamu** Koll. Powdery Green Sapphire

5 : 1 Dangs (Gujarat), July ; 3 Gund, May ; 1 Cheena, Apr.

Distribution : Kumaon to Naga Hills, Nepal, Sikkim.

Dangs is far south of the recorded range. It is very rare in the Dangs. Only one specimen was obtained.

15. **Amblypodia atrax** Hew. Dark Brokenband Oakblue

2 : 1 Ranikhet ; 1 Burma. No dates.

Distribution : Shan States, Burma.

The occurrence at Ranikhet is a considerable extension of the westward range.

16. **Spindasis abnormis** M. Abnormal Silverline

3 : 1 Lonavla, Oct. ; 2 Coonoor, Mar.

Distribution : Coonoor, Coorg, S. India.

According to Evans, S. India includes Lonavla but the species has not been recorded beyond Nilgiris and Coorg. Bean (1968) collected them at Lonavla only recently.

17. **Tajuria jehara** M. Plains Blue Royal

9 : 4 Poona, July, Sept. ; 1 Jabalpur, July ; 3 Nilgiris, June, Oct. ; 1 Karwar, Dec.

Distribution : S. India, Ceylon, Simla to Bengal. K. Cantlie (1962) includes Bombay, Dehra Dun and Lucknow under this head. Jabalpur therefore is almost in its distributional area.

18. **Rapala scintilla** DeN. Scarce Slate Flash

5 : 1 Kallar, Nilgiris, Aug. ; 1 Calcutta, Nov. ; 1 Sikkim, no date ; 2 Manipur Sept., Oct.

Distribution : Nepal, Sikkim to Assam and Burma.

This is another example of a Himalayan species occurring in the South.

Family PIERIDAE

19. **Colotis vestalis** (Butl.) White Arab

11 : 1 N. Kanara, no date ; 8 Karachi, June, Oct. ; 1 Kutch, no date ; 1 Unao, no date.

Distribution : Baluchistan to Saurashtra, Punjab, Rajputana, Uttar Pradesh, Madhya Pradesh. Talbot (1939) mentions Western India but no locality south of Saurashtra is noted. N. Kanara may now be taken as the southernmost point of the distribution of this species.

20. **Colias croceus** (Four.) (= *alecto* L.) Dark Clouded Yellow

24 : 1 Dakuri (U.P.), no date ; 3 Nilgiris, July, Aug. ; 4 Assam, Apr. ; 2 Sikkim, May ; 7 Chitral, Apr. to July ; 3 Murree, Apr. ; 4 Kashmir, Apr., June.

Distribution : Baluchistan to N. Punjab, Kumaon, Sikkim, Assam, N. Burma, Nepal and Bombay.

Bombay is mentioned by Talbot (1939) and is the only place south of the Himalayas where this butterfly is found. Nilgiris now constitutes the southernmost locality for this species.

21. **Gonepteryx rhamni nepalensis** Doub. Common Brimstone

13 : 1 Nilgiris, July ; 4 Chitral, Sept. ; 8 Murree, Apr.

Distribution : N. Waziristan, Baluchistan, Himalayas, Hills of N.E. India and Burma.

Another species found in the Nilgiris hitherto supposed to be met with only in the north. The males collected from Nilgiris and Murree are fairly deep yellow as against the description given by Evans (1932) and Wynter-Blyth (1957) as sulphur yellow.

Family HESPERIIDAE

22. **Daimio bhagava** M. Common Yellowbreast Flat

7 : 5 Nilgiris, Jan., July, Nov. ; 2 Burma, Sept., Oct.

Distribution : Bombay to C.P., Sikkim to Burma, Andamans.

Wynter-Blyth (1946) mentions this as a very rare species at Kallar in Nilgiris.

23. **Hasora vitta** Butl. Plain Banded Awl

8 : 2 Dharwar, no date ; 5 N. Kanara, Mar., Aug. ; 1 Manipur, Oct.

Distribution : Kanara, Sikkim to Burma, Orissa.

A slight extension from N. Kanara to Dharwar.

24. **Ismene [Bibasis] gomata** M. Pale Green Awlet

2 : Both in Burma, July, Oct.

Distribution : Kanara, Sikkim to Assam, S. India ; China ; Malaya etc.
So far it has not been reported from Burma,

25. **Thoressa (Halpe) honorei** DeN. Madras Ace

5 : 1 Belgaum, Oct. ; 4 N. Kanara, Jan., Feb., Sept.

Distribution : Nilgiris, Palnis, N. Kanara, Trichinopoly.

Some slight extension from N. Kanara to Belgaum.

26. **Pelopidas sinensis** M. Large Branded Swift

8 : 2 Poona, Oct. ; 2 N. Kanara, Jan. ; 3 Kallar, Jan. ; 1 Loimwe, May.

Distribution : Kangra to Assam, Shan State, Bengal, Ceylon, Palnis, Nilgiris, Coorg, N. Kanara.

Poona, though fairly near to Kanara is about 300 km. north of it and the other places are farther still.

27. **Notocrypta feisthamellii** (Boisd.) Spotted Demon

10 : 4 N. Kanara, Aug., Sept. ; Oct., 1 Coorg, Oct., 2 Naga Hills, Aug., 1 Maram, Oct., 1 Manipur, Apr., 1 Ranikhet, no date.

Distribution : Murree to Assam and Burma.

This butterfly loves thick jungles and breeds in grass, ginger, palms and cardamom. Both Coorg and N. Kanara abound in such areas.

REMARKS

Lepidopterists from time to time have collected butterflies from various places in India e.g. Bombay, Nilgiris, Palni Hills, Nepal etc. but these collectors generally did not come across the species mentioned above in the respective areas, except for Best (1951 and 1955) who collected most of the species mentioned and shown here as new to Bombay.

Most of the species mentioned are rare even in localities mentioned as their habitat. It is remarkable that a number of species supposed to be Himalayan in distribution occur in the Nilgiris, but have remained unnoticed so far. Some species that are common in the Himalayan region seem to be breeding in the Nilgiris though sparsely and in certain pockets only, giving a discontinuous distribution, lending support to the hypothesis propounded by Hora (1949), that the similarity of the flora and fauna of Ceylon, the Western Ghats, the Satpuras etc., to that of the Himalayas and Malaya point to their same origin and affinities.

It seems probable that some of the butterflies appear in certain localities occasionally and unless they are caught at that time remain completely undetected. *Spindasis abnormis* M., for instance, a rather rare species breeding in Lonavla (Western Ghats) year after year in small numbers and for brief periods is not met with generally in Khandala, only a few kilometres away or even in other areas of Lonavla with the same topography and climate and with the same food conditions. It is

possible, therefore, that most of the species mentioned above are very rare and are not seen in spots commonly visited by collectors visiting for short periods during holidays. Unless a sustained effort is made, throughout the year and for some years it may not be possible to have a correct idea of the fauna of a particular area.

REFERENCES

- BAILEY, F. M. (1951): Notes on Butterflies from Nepal. *J. Bombay nat. Hist. Soc.* **50** : 281-298.
- BEAN, A. E. (1968): Occurrence of *Spindasis abnormis* M. on Western Ghats. *ibid.* **65** : 618-632.
- BEST, A. E. G. (1951): The Butterflies of Bombay and Salsette. *ibid.* **50** : 331-339.
- , (1955): Butterflies of Bombay and Salsette—Additions. *ibid.* **53** : 282-284.
- CANTLIE, KEITH (1962): Lycaenidae portion of Evans' Identification of Indian Butterflies. Revised. Bombay nat. Hist. Soc., Bombay.
- EVANS, W. H. (1932): Identification of Indian butterflies. Bombay nat. Hist. Soc., Bombay.
- HORA, S. L. (1949): Satpura Hypothesis of the distribution of Malayan Fauna and Flora to Peninsular India. *Proc. Nat. Inst. Sci. India* **15** : 307.
- TALBOT, G. (1939, 1947): Fauna of British India including Ceylon and Burma. Butterflies. Vols. I and II. London.
- WYNTER-BLYTH, M. A. (1957): Butterflies of the Indian Region. Bom. nat. Hist. Soc., Bombay.
- , (1946): Butterflies of the Nilgiris. *J. Bombay nat. Hist. Soc.* **45** : 47-61.